

S063242



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

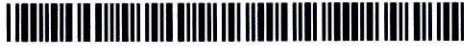
SWA6A-2-OH
Job Sheet 176291



Part No: SWA6A-2-OH

Job Qty: 1 ea

Part Name: Electric Swivel 6,000 lb Safe Work Load (2,721 kg)



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 4/19/18

Job Tracking No: RA150 SN AC10006

Due Date: 5/3/18

Created By: Michelle Gagnon-Donovan

Type: Return

Description:

Note: O&OPM-SWA6 REV.2 IPP REV:A 18.01.18 NEW ISSUE DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
					hrs	Hrs			
100	Start-up Operation	1 Ea	5/3/18	5/3/18	0.00	0.00	Start Up Small Fab-4		
110	Small Fab	1 pcs	5/3/18	5/3/18	0.00	1.00	Small Fab-9		A.P. SP
120	QC	1 pcs	5/3/18	5/3/18	0.00	0.00	QC5		SP
130	Customer Acceptance	1 pcs	5/3/18	5/3/18	0.00	0.00			
140	Outsource	1 pcs	5/3/18	5/3/18			SKY002-VC	39812	CX 18/05/10
150	Packaging	1 pcs	5/3/18	5/3/18	0.00	0.00	Packaging2		A/M 25/10
160	QC	1 pcs	5/3/18	5/3/18	0.00	0.00	QC6		33
170	Small Fab	1 pcs	5/3/18	5/3/18	0.00	1.00	Small Fab-9		9-89 A.P.
180	QC	1 pcs	5/3/18	5/3/18	0.00	0.00	QC5		SP
190	Packaging	1 pcs	5/3/18	5/3/18	0.00	0.00	Packaging3-2		SP
200	QC21-FG	1 Ea	5/3/18	5/3/18	0.00	0.00	QC21		21

Part Op 110 - RA: TEST ASSEMBLY. DISASSEMBLE ASSEMBLY. INSPECT DAMAGE PART.

Descriptions: 170 - RE-ASSEMBLE. TEST ASSEMBLY. INSTALL OVER HAUL KIT 648.4708.

AEROSHELL GREASE NO.7 (M138724) LOCTITE 242 (M138762) SILICONE GE (M138765)

MAY 16 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
648.4708	SWA6A Overhaul Kit	1 Ea (1 ea)	100-Start up Operation	
SWA6A-2-AR	Electric Swivel 6,000 lb Safe Work Load (2,721 Kg)	1 Ea (1 ea)	100-Start up Operation	3041058

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Start up Operation	648.4708	1	0	0
	SWA6A-2	1	0	0

Part Specifications

Specifications could not be found.

Plex 4/19/18 2:35 PM Dart.Gagnon.Michelle

Inspection Sheet Complete RA150

Customer QA Ref #

0

Part Number	Batch / Serial #	Quantity	Part Complete	Rev/CHG Current	New Paperwork	New Labels	Disposition	Work order #	Work order instructions
C60	SN 6071, M994-03	2	☐ es	☐ es	☐ es	☐ es	CUSTOMER SUPPLIED	S041605(6071); and S052546(M994-03)	Customer supplied part. Customer sending C60 SN 6071 to be overhaul. Preform overhaul and return to customer. Customer also sending C60 M994-03 to be overhaul. C60 was received with cage. Remove from cage, preform overhaul, re-install hook to cage and return to customer.
C45	AC11007	1	☐ es	☐ es	☐ es	☐ es	CUSTOMER SUPPLIED	S050438	Customer supplied part. Customer sending C45 AC11007 to be overhaul. C60 was received with cage. Remove from cage, preform overhaul, re-install hook to cage and return to customer.
SWA6A-2	AC10006, AC11003, AC4006,	3	☐ es	☐ es	☐ es	☐ es	CUSTOMER SUPPLIED	S041058(AC10006); S041604(AC11003); S042053(AC4006)	Customer supplied part x3. Customer sending SWA6A-2 AC4006, AC11003 and AC4006 to be overhaul. Preform overhaul and return to customer.
SWA6A-4	AC09002 AC09001	2	☐ es	☐ es	☐ es	☐ es	CUSTOMER SUPPLIED	S041603(AC09002) and S061865(AC09001)	Customer supplied part x2. Customer sending SWA6A-4 serial# AC09002 and AC09001 for testing. Preform test as per Electric Swivel SWA6A. Return to customer.
P5400-100	AC09003	1	☐ es	☐ es	☐ es	☐ es	CUSTOMER SUPPLIED	S052552(AC09003)	Customer supplied part. Customer sending longline P5400-100 serial# AV09003 for inspection Send out for pull test. Return to customer.
P5400-50	AC09002	1	☐ es	☐ es	☐ es	☐ es	CUSTOMER SUPPLIED	S041056(AC09002)	Customer supplied part. Customer sending longline P5400-50 serial# AV09002 for inspection Send out for pull test. Return to customer.
P7300-150	BMMG722	1	☐ es	☐ es	☐ es	☐ es	CUSTOMER SUPPLIED	S050439(BMMG722)	Customer supplied part. Customer sending longline P7300-150 serial# BMMG722 for inspection Send out for pull test. Return to customer.
P7300-50	AC09001, AC09002	2	☐ es	☐ es	☐ es	☐ es	CUSTOMER SUPPLIED	S041057(AC09001) and S052555(AC09002)	Customer supplied part. Customer sending qty2 of longlines P7300-50 serial# AC09001 and AC09002 for inspection Send out for pull test. Return to customer.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

C2-6HC	AC09001, AC09002	2	☐ yes	☐ yes	☐ yes	☐ yes	CUSTOMER SUPPLIED	S061883(AC9001) and S061884(AC09002)	Customer supplied part qty 2. 1.Customer sending C2-6HC serial# AC09001 for overhaul. Carousel C2-6HC was received with all C2 hook install serial# M987-07, M987-10, M987-11, M987-12, M987-13, and M987-14 Disassemble and perform overhaul on carousel and all C2 hook as per manual and record all finding as per test sheet. Reinstall and return to customer. 2.Customer sending C2-6HC serial# AC09002 for overhaul. Carousel C2-6HC was received with all C2 hook install serial# M987-09, M987-16, M987-17, M987-18, M987-20, and M987-22 Disassemble and perform overhaul on carousel and all C2 hook as per manual and record all finding as per test sheet. Reinstall and return to customer
C2(These Hooks are part of C2-6HC above)		12	☐ yes	☐ yes	☐ yes	☐ yes			See C2-6 HC above
			☐ yes	☐ yes	☐ yes	☐ yes			

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

PRE-TEST



Electric Swivel SWA6A

Work Order 176291

Customer _____

Number of Wires 2Date 2018/05/03Serial Number AC10006

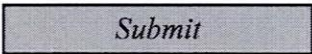
Number of Cycles	Load (Lbs.)	Action	Pass/Fail	
1	6,000	Check for Conductivity against all wires.	- FAIL	(WHITE)
1	6,000	Check all wires for grounding against swivel body.	- PASS	
1	3,000	Check for Conductivity against all wires.	- FAIL	(WHITE)
1	3,000	Check all wires for grounding against swivel body.	- PASS	
1	1,500	Check for Conductivity against all wires.	- FAIL	(WHITE)
1	1,500	Check all wires for grounding against swivel body.	- PASS	
1	0	Check for Conductivity against all wires.	- FAIL	(WHITE)
1	0	Check all wires for grounding against swivel body.	- PASS	

Test Conducted By: ALAN PATRY

Signature: _____

Technician

QC 5 Small FAB / QA

Submit



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO039812**

Supplier: SKY002-VC
Skyservice
6120 Midfield Road
Mississauga
ON
L5P 1B1 Canada
Phone: 905-678-5636
Fax: 905-678-5841

PO No: PO039812
PO Date: 5/7/18
Due Date: 5/10/18
Purchase Order Revision:
Revision Date:
Ship-To Contact: Lavoie, Chantal
Phone: clavoie@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	174297	D4464-041	Fuel Tank Assembly ISSUE P/O : LIQUID PENETRANT INSPECTION AS PER QSI 038 OR LPI AS PER ASTM 1417 LEVEL 2	Firmed	5/10/18	1 pcs	0 pcs ✓ 1x	1 pcs	\$234.00/pcs	\$234.00
2	176652	D212-664-101	Fwd Crosstube - High *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Liquid Penetrant Inspection as per QSI 038 LPI as per ASTM 1417 Level 2 Attach copy of NDT results to work order.	Firmed	5/10/18	1 pcs	0 pcs ✓ 1x	1 pcs	\$224.00/pcs	\$224.00
	176653			Firmed	5/10/18	1 pcs	0 pcs ✓ 1x	1 pcs	\$224.00/pcs	\$224.00
	176654			Firmed	5/10/18	1 pcs	0 pcs ✓ 1x	1 pcs	\$224.00/pcs	\$224.00
	176655			Firmed	5/10/18	1 pcs	0 pcs ✓ 1x	1 pcs	\$224.00/pcs	\$224.00
Sub Total:						4	0	4		\$896.00
3	176291	SWA6A-2-OH	Electric Swivel 6,000 lb Safe Work Load (2,721 kg)	Firmed	5/10/18	1 pcs	0 pcs ✓ 1x	1 pcs	\$89.00/pcs	\$89.00
4	176051	SWA15A-3-OH	Electric Swivel 15,000 lb Safe Work Load (6,818 kg)	Firmed	5/10/18	1 pcs	0 pcs ✓ 1x	1 pcs	\$89.00/pcs	\$89.00
5	176050	SWA15A-3-OH	Electric Swivel 15,000 lb Safe Work Load (6,818 kg)	Firmed	5/10/18	1 pcs	0 pcs ✓ 1x	1 pcs	\$89.00/pcs	\$89.00
6	176762	SWA6A-4-OH	Electric Swivel 6,000 lb Safe Work Load (2,721 kg)	Firmed	5/10/18	1 pcs	0 pcs ✓ 1x	1 pcs	\$89.00/pcs	\$89.00
Grand Total:										\$1,486.00

Order Notes

reid AT 10/05/10

**skyservice****Work Order Traveler**
Sky Service F.B.O. Inc.

10105 Ryan Avenue, Dorval, Quebec, H9P 1A2

TCCA AMO 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO35939	Customer: Dart Aerospace Ltd.	Dept: NDT YUL	Reference: PO039812
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	
Task: UNSCHEDULED			Sequence: 1

Work Required:

CARRY OUT NDT ON:

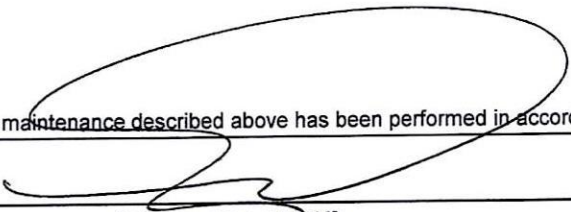
2 ELECTRIC SWIVEL (12 PARTS), P/N# SWA15A-3-OH , J/S# 176050 , 176051

1 ELECTRIC SWIVEL (5 PARTS), P/N SWA6A-4-OH , J/S# 176762

1 ELECTRIC SWIVEL (6 PARTS), P/N SWA6A-2-OH , J/S# 176291

Action Taken:						Date:	Initial/Stamp:
MPI C/O IAW ASTM E-1444M-12 DE-MAGNETIZED AS PER ASTM E-144494-A ***NO CRACK FOUND*** MAGBENCH S/N 208123 CAL DUE: 23-JUL-2018 POWDER 14A BATCH# MPO13600 CARRIER II BATCH# MPO20165						MAY 07 2018	 DOT-APP 20 53-89
<i>Description</i>	<i>Location</i>	<i>P/N</i>	<i>Qty</i>	<i>Batch</i>	<i>S/N Off</i>	<i>S/N On</i>	

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature: 	ACA/SCA Stamp DOT-APP 20 53-89	Date: MAY 07 2018
Name: RAFIK MELIKYAN		

Bill of Materials

Part No:	SWA6A-2-OH	Component Part No:		Operation:	
Part Operation:		Item No:		Part Status:	
Active:	☒				

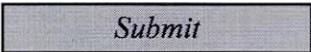
Part No	Description	Operation	Quantity	Component Part/Item	Component Name	Sub Components	Mfr Parts	Special Comments
SWA6A-2-OH	Electric Swivel	100-Start up	1 Ea/Ea	SWA6A-2-AR	Electric Swivel 6,000 lb Safe W	0		5037083
	Electric Swivel	170-Small Fa	1 Ea/pc	188-FPSS-1032-5/8	Set Screw	0		5066757
			4 Ea/pc	188-FSCS-1032-5/8	Screw	0		5066767
			1 Ea/pc	C45-15-13	Sleeve	0		5031225
			1 Ea/pc	EL-PLUG-F	3-Prong Female Spade Plug	0		
			1 Ea/pc	EL-PLUG-M	3-Prong Male Spade Plug	0		
			6 ft/pc	EL314-SJTOW	3 Wire	0		6 Feet long
			1 Ea/pc	SWA6A-100	Lower End	1		
			1 Ea/pc	SWA6A-1100	Upper Bearing	1		
			1 Ea/pc	SWA6A-1200	Lower DU Bearing	0		
			1 Ea/pc	SWA6A-1300	Lower Thrust Bearing	0		
			1 Ea/pc	SWA6A-1400	Circlip Internal	0		
			1 Ea/pc	SWA6A-1800	Cover	1		
			4 Ea/pc	SWA6A-1900	Female Spade Terminal - 1/4"	0		
			1 Ea/pc	SWA6A-200	Upper End	1		
			1 Ea/pc	SWA6A-300	Bearing Housing	1		
			1 Ea/pc	SWA6A-400	Thrust Washer	1		
			1 Ea/pc	SWA6A-500	Semi Rings	1		
			1 Ea/pc	SWA6A-600	Collar	1		
			2 Ea/pc	SWA6A-700	Wire Clamp	1		
			1 Ea/pc	SWA6A-800A	Connector Bushing	1		
			1 pcs/pc	SWA6A-900A	Rotary Contact	0		

070133
 5044605
 504385
 5029406
 5031225

5029417
 5035152

Work Order 176291 (5063242) Customer _____Number of Wires SWA6A-2
2 wires Date 18/05/15Serial Number AC 10006

Number of Cycles	Load (Lbs.)	Action	Pass/Fail
1	6,000	Check for Conductivity against all wires.	- PASS
1	6,000	Check all wires for grounding against swivel body.	- PASS
1	3,000	Check for Conductivity against all wires.	- PASS
1	3,000	Check all wires for grounding against swivel body.	- PASS
1	1,500	Check for Conductivity against all wires.	- PASS
1	1,500	Check all wires for grounding against swivel body.	- PASS
1	0	Check for Conductivity against all wires.	- PASS
1	0	Check all wires for grounding against swivel body.	- PASS

Test Conducted By: ALAIN PATRY
TechnicianSignature: 
QC 5 Small FAB / QASubmit